

WHAT IS CLAIMED IS:

1. A semiconductor laser device, wherein
a silicon oxide film is formed so as to be in contact with at least one
end of a semiconductor laser element crystal as an end face protection film
for a semiconductor laser element.
2. The semiconductor laser device according to claim 1, wherein
silicon oxide forming said silicon oxide film has an index of refraction
of at least 1.6.
3. The semiconductor laser device according to claim 1, wherein
a main emission face of said semiconductor laser element has a
reflectivity of 6% to 17%, and a back face thereof has a reflectivity of at least
85%.
4. The semiconductor laser device according to claim 1, wherein
another film is formed outside said silicon oxide film.
5. The semiconductor laser device according to claim 4, wherein
alumina is used as a material for forming another film.
6. The semiconductor laser device according to claim 4, wherein
said silicon oxide film has a film thickness of 0.5nm to 20nm.
7. A method of manufacturing a semiconductor laser device having
a silicon oxide film formed so as to be in contact with at least one end of a
semiconductor laser element crystal and another film formed outside said
silicon oxide film, wherein
5 said silicon oxide film and another film are formed in a single
chamber.
8. A method of manufacturing a semiconductor laser device having

a silicon oxide film formed so as to be in contact with at least one end of a semiconductor laser element crystal, wherein

5 said silicon oxide film is formed by resistance heating vapor deposition.